

**PREFILED TESTIMONY  
OF  
THOMAS E. LAMM**

**RE: DRAFT PLAN FOR RETAIL ELECTRIC METERING AND BILLING  
SERVICES**

**CASE NO. PUE000346**

**Q1. PLEASE STATE YOUR NAME, EMPLOYER, POSITION, AND  
ADDRESS.**

**A1.** My name is Thomas E. Lamm. I am employed by the State Corporation Commission ("Commission") as an Assistant Director in the Division of Energy Regulation. My business address is Virginia State Corporation Commission, Post Office Box 1197, Richmond, Virginia 23218.

**Q2. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

**A2.** By Order dated July 12, 2000, the Commission initiated the instant proceeding to develop a recommendation and draft plan for retail electric metering and billing services for presentation to the Legislative Transition Task Force ("LTTF") on or before January 1, 2001.<sup>1</sup> Incumbent electric utilities were directed, and interested parties were invited, to comment regarding the Discussion Draft Plans ("Discussion Plans") and associated

implementation issues included in attachments to the Order. All parties were provided the opportunity to request a hearing. The Discussion Plans were developed by the Commission's Staff and were considered "straw men." That is, they were intended to serve only as a basis for initiating discussion during development of an actual recommendation and draft plan for presentation to the LTTF.

The Commission received comments from fourteen parties including The Potomac Edison Company d/b/a Allegheny Power ("Allegheny Power"), Appalachian Power Company d/b/a American Electric Power ("AEP"), the Division of Consumer Counsel of the Office of the Attorney General ("OAG"), Automated Energy, Inc. ("AEI"), the Cooperatives,<sup>2</sup> Delmarva Power & Light Company ("Delmarva"), Edison Electric Institute ("EEI"), the Industrial Electric Customers ("Industrials"),<sup>3</sup> LG&E Energy Corporation ("LG&E"), National Energy Marketers Association ("NEMA"), RGC Resources, Inc. ("RGC"), Schlumberger Resource Management Services North America ("Schlumberger"), Utility.com, and Virginia Electric and

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<sup>1</sup> The Commission issued the July 12, 2000, Order pursuant to § 56-581.1 of the Virginia Electric Utility Restructuring Act (the "Act"), Chapter 23 (§§ 56-576 et seq.) of Title 56 of the Code of Virginia (see Attachment I).

<sup>2</sup> The Cooperatives is a group of electric cooperatives consisting of A & N, BARC, Community, Central Virginia, Craig-Botetourt, Mecklenberg, Northern Neck, Northern Virginia, Powell Valley, Prince George, Rappahannock, Shenandoah Valley, Southside, and the Virginia, Maryland, & Delaware Association of Electric Cooperatives.

<sup>3</sup> The Industrial Customers is a group comprised of the Virginia Committee for Fair Utility Rates and the Old Dominion Committee for Fair Utility Rates.

Power Company ("Virginia Power"). In addition to providing comments, the Cooperatives and Virginia Power requested a hearing. RGC and EEI did not provide specific comments relative to the Discussion Plans, but each expressed an interest in monitoring this proceeding with the possibility of participation should the Commission schedule a hearing or establish additional procedural dates.

On September 13, 2000, the Commission issued an Order Setting Hearing, establishing a procedural schedule and directing the Staff to file testimony including a proposal for a recommendation and draft plan for presentation to the LTTF. The Staff is directed to consider comments filed in this proceeding when developing its proposal. My testimony responds to this directive by presenting the Staff's proposal for a recommendation and draft implementation plan regarding retail electric metering and billing.

**Q3. DO THE DISCUSSION PLANS REFLECT THE STAFF PROPOSAL WITH RESPECT TO RETAIL ELECTRIC METERING AND BILLING?**

**A3.** No, the Discussion Plans are not a Staff proposal, although many elements are certainly included in the Staff proposal. As stated previously, those plans were developed with the intent of initiating deliberation and discussion of retail electric metering and billing issues. Their primary purpose was to obtain input from interested parties on key metering and billing policy issues.

The Staff proposal presented in my testimony has incorporated several of the comments and suggestions received in this proceeding.

**Q4. SUMMARIZE HOW THE STAFF'S PROPOSAL FOR RETAIL BILLING SERVICE DIFFERS FROM THE DISCUSSION PLAN.**

**A4.** The Staff proposal regarding retail electric billing service is included as Attachment II to my testimony. The proposal is identical to that presented in the Discussion Plan with respect to authorization of competitive service providers ("CSPs"),<sup>4</sup> which meet applicable license requirements, to offer and provide retail billing service to their customers. Additionally, the Staff proposal results in virtually the same "billing options" presented in the Discussion Plan; however, the Staff slightly alters the presentation of such options. Specifically, the Staff proposal recognizes: 1) a standard billing service consisting of the separate delivery of billing statements from each retail electric service provider (usually the incumbent utility providing distribution service ("LDC") and the CSP providing energy supply service); and 2) a new consolidated billing service, offered and provided by the CSP, that would deliver both LDC and CSP bills on a joint billing statement, and

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<sup>4</sup> Virginia Power proposes use of the term competitive service provider ("CSP"), as opposed to energy service provider ("ESP"), for consistency with terminology in previous Commission proceedings associated with retail pilot programs. Staff believes the use of "CSP" is appropriate, but emphasizes that the Staff's retail billing proposal specifically would not create a new type of CSP to provide solely electric billing service. Additionally, the Staff proposal would only authorize a CSP to provide billing service to its own retail customers.

also receive and disburse a single customer payment to the two retail service providers. The consolidated billing service includes two options in that, at the discretion of the CSP, either the LDC or the CSP may prepare and issue the joint billing statement and disburse customer payment.

The fundamental modifications that the Staff proposes to the Discussion Plan include the following:

1. Delay the effective date of the consolidated billing service option in which the CSP prepares and issues the joint billing statement from January 1, 2002, to January 1, 2003.
2. Authorize generation default service providers to provide billing services to their customers should such authorization be needed.
3. Add a provision authorizing and directing the Commission to develop and establish rules and a consumer education plan to implement the draft plan and to ensure reasonable levels of billing accuracy, timeliness, and quality and consumer readiness and protection.
4. Eliminate the requirement that LDCs support consolidated billing service options under the “rate-ready” protocol.<sup>5</sup>
5. Add a provision establishing that the net costs/savings associated with LDC provision of required consolidated billing support services to CSPs may be settled through tariffs specifying charges/credits from the LDC to CSPs.

Additionally, while not incorporated in the Staff Proposal presented in Attachment II, the Staff testimony proposes that the Commission consider

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<sup>5</sup> Under a “rate-ready” protocol the party preparing the consolidated bill is provided the rate structures and calculates the billing charges of each retail service provider for inclusion on the bill.

the appropriateness of recommending special provisions with respect to the service territories of municipal utilities and electric cooperatives.

**Q5. SUMMARIZE HOW THE STAFF'S PROPOSAL FOR RETAIL METERING SERVICE DIFFERS FROM THE DISCUSSION PLAN.**

**A5.** The Staff proposal regarding retail metering service is fundamentally different from the Discussion Plan in that the Staff believes it is premature to recommend to the LTTF authorization for CSPs to offer and provide metering services. The Staff proposes additional study of the multitude of complex issues surrounding the restructuring of electric metering. The Staff also proposes the establishment of a metering working group to assist the Staff in resolving these issues and in developing a recommendation to present to the Commission with respect to the market structure that will best serve Virginia's transitioning electric industry.

Should the Commission decide to recommend to the LTTF making metering a competitive service at this time, the Staff proposes limiting its availability to large customers, with an effective date of January 1, 2004. The Staff also proposes limiting meter ownership to the LDC or CSP.

**Q6. PROVIDE AN OVERVIEW OF THE STAFF'S PERSPECTIVE REGARDING THE RESTRUCTURING OF RETAIL ELECTRIC METERING AND BILLING SERVICES.**

**A6.** The Staff believes the primary objective of restructuring the provision of retail electric metering and billing services in Virginia at this time is to accommodate and enhance the development of a competitive retail electric energy supply market. In developing its proposal, the Staff has considered key factors, including the statutory criteria listed in § 56-581.1 of the Act, which are relevant to this objective and to Virginia's current restructuring process. Such factors include the current business model of Virginia's transitioning electric industry, customary business practices, and the learning curve progress of consumers, suppliers, utilities, and regulators.

The transition of Virginia's electric industry will be substantial and unavoidably will result in some degree of confusion and frustration among all market participants. This transition and the development of a truly competitive generation market will likely require several years. While it is important to restructure critical elements in the provision of metering and billing services to accommodate and enhance this transition, it is essential that such restructuring be conducted in a deliberate manner that is sensitive to potential adverse impacts of substantial and rapid change, especially as

pertains to consumers. Potential restructuring elements that provide vague or speculative benefits, and also significantly increase complexity, should be deferred to later in the transition. Immediate focus should remain on those activities that provide significant value to fostering the development of a competitive retail energy supply market and that are consistent with current progress along the learning curve.

**Q7. SHOULD RETAIL ELECTRIC BILLING BE MADE A COMPETITIVE SERVICE?**

**A7.** Certainly the electric billing and collection process should be modified to accommodate and enhance Virginia's competitive restructuring business model; however, such restructuring should not be approached in a manner similar to that being pursued with respect to competitive retail energy supply services. The billing and collection process is a fundamental business support activity, not a separate functional electric service in the sense of generation, transmission, and distribution, which comprise the production and delivery of the electric product. Every business has a basic responsibility to ensure the accurate identification of services rendered to its customers, to maintain accurate customer accounts, and to bill and collect accordingly. The business is the initiator and primary benefactor of this process. It is customary business practice that the provider of a service decides the terms



and conditions of service including the billing and payment options offered to customers.

**Q8. HOW SHOULD RETAIL ELECTRIC BILLING SERVICE BE RESTRUCTURED?**

**A8.** Under Virginia's current restructuring model, the vast majority of retail customers choosing a competitive supplier will have two retail electric service providers – the LDC providing regulated distribution service and the CSP providing competitive energy supply service including transmission service procured in the wholesale market.<sup>6</sup> Consistent with customary business practice and this business model, the Staff believes that each of these retail service providers has an inherent responsibility for billing and collection activities associated with services rendered. Consequently, the Staff believes that the separate provision and collection of bills by each retail service provider should be viewed as the basic or standard restructured retail billing model. Accordingly, the CSP should be authorized to bill its retail customers directly for services that it renders in order to meet this responsibility.

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<sup>6</sup> Certain large retail customers may be able to procure retail transmission services as a separate service. To the extent regulated electric services are further unbundled and made competitive, there may be more types of competitive service providers.

At the same time, unique circumstances with respect to the restructured electric industry may also justify the provision of a new optional retail service associated with the billing process.

**Q9. EXPLAIN THESE UNIQUE CIRCUMSTANCES AND THE NEW RETAIL SERVICE.**

**A9.** The general consensus appears to be that most small electric consumers will prefer to receive a single electric billing statement rather than separate statements from two retail service providers. Although trends in this preference may be argued, the Staff generally agrees with this assessment at present. To ensure that consumers having a single-bill preference are not discouraged from participating in the competitive market, the Staff proposes to authorize CSPs to offer retail customers a consolidated electric billing service. Such service would normally include: 1) a joint presentation of the two retail service bills, from the LDC and the CSP, in a single billing statement that complies with applicable Commission regulations; and 2) a conduit for disbursing a combined customer payment to the two retail service providers.

Such CSP authorization necessitates that LDCs be required to support and undertake the necessary coordination with CSPs to enable this new consolidated billing service. At the discretion and request of the CSP, the

LDC should be required to support the preparation and delivery of the consolidated billing statement by either the LDC or CSP in accordance with the “bill-ready” protocol,<sup>7</sup> as well as to support the associated customer payment disbursement process.

This consolidated billing is an optional billing and payment coordination service, one of convenience, for the customer. It does not supplant either retailer's fundamental responsibility to bill and collect for services rendered. It affects how each retail service provider mechanically or procedurally bills and collects, not whether they bill and collect. Each retail service provider must continue to: maintain customer accounts; calculate, prepare and submit customer-specific bills or billing information (perhaps in an electronic format); and pursue collection activities. Similarly, the retail customer retains ultimate responsibility to pay each retailer for delivered services.

**Q10. GIVEN THAT BOTH THE LDC AND CSP ARE RETAIL SERVICE PROVIDERS, WHY SHOULD THE CSP BE AUTHORIZED TO OFFER THE CONSOLIDATED BILLING SERVICE?**

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<sup>7</sup> Consolidated billing under a “bill-ready” protocol requires that each retail service provider calculate its own billing charges and provide this information to the party preparing the joint billing statement for incorporation in allotted space on the joint bill.

**A10.** The value of, and potential demand for, this optional new service arises because of the restructuring of the electric industry and the introduction of an additional retail service provider, the CSP. The Staff believes that authorizing one party to offer and arrange for this service would minimize confusion among consumers and reduce coordination issues between the CSP and the LDC.

As a competitive entity, the CSP is chosen directly by the retail customer and has the strongest incentive to respond to customer demands. It is also logical that it be allowed to offer this service since billing arrangements should be understood and agreed to in conjunction with a customer's selection of a CSP for the provision of energy supply service.

Consistent with this approach, the imposition of requirements on the LDC to provide the coordination and support needed to enable the CSP to provide this retail service is appropriate as long as the LDC is afforded a reasonable opportunity to recover its prudently incurred cost. The LDC is a public service company afforded privileged treatment and may be assigned specific and reasonable responsibilities by the General Assembly to support and advance public policy objectives.

**Q11. IF CSPs ARE AUTHORIZED TO OFFER A CSP CONSOLIDATED BILLING OPTION WHY SHOULD THE LDCs BE REQUIRED TO**

**ALSO SUPPORT AN LDC CONSOLIDATED BILLING OPTION ON BEHALF OF THE CSP?**

**A11.** The Staff believes that this requirement should be a transitional measure that should be rescinded after the development of a sufficiently competitive market with the presence of a reasonable number of CSPs having the capability to offer the CSP consolidated billing option. During the initial stages of industry transition, it is important to encourage the entry of new competitive suppliers to enhance market development. Many of these potential new suppliers may view the ability to offer a consolidated billing service as an important marketing tool, but not have fully developed systems capable of performing consolidated CSP billing in compliance with applicable regulations and standards. While theoretically the CSP could contract with an independent wholesaler to provide this service, the development of a wholesale market capable of meeting requirements and providing a practical alternative may require some time as well. In the meantime, the Staff believes requiring the LDC consolidated billing option advances the public policy goal of promoting the development of a competitive retail electricity market.

**Q12. DO THE COMMENTS SUBMITTED IN THIS PROCEEDING SUPPORT THE DISCUSSION PLAN'S AUTHORIZATION OF**

**LICENSED CSPs TO OFFER AND PROVIDE RETAIL BILLING  
SERVICE INCLUDING THE THREE SPECIFIED BILLING OPTIONS?**

**A12.** With two major exceptions, the Staff's interpretation of submitted comments found general support for (or at least a lack of stated opposition to) CSP authorization to offer the three basic billing options (i.e., separate billing and consolidated billing by either the LDC or CSP). Of course, it is not known whether the parties submitting comments will concur with the Staff's foregoing analysis as the basis for these options.

In opposing the Discussion Plan, the Cooperatives state that billing should continue to be provided by the LDC until consumers become more comfortable with the concept and functions of a competitive generation (or energy supply) market. The Cooperatives indicate that the Discussion Plan provisions for billing would add to the conflict, confusion, and uncertainty regarding the restructuring of the electric industry. Further, the Cooperatives state that the Discussion Plan fails to consider the degree of control that cooperative consumers have over their billing systems through their elected directors.

AEP, which supports competitive billing as early as possible, offers that the Discussion Plan appears to be overly prescriptive and limits potential market development. Specifically, AEP recommends: 1) the additional

authorization and licensing of a new type of retail service provider ("billing agents") to provide billing services; and 2) allowing consolidated billing services and options to develop from market forces without regulatory requirements or intrusion.

**Q13. PLEASE RESPOND TO THE COOPERATIVES' COMMENTS REGARDING THE RETAIL BILLING MARKET STRUCTURE IN THE DISCUSSION PLAN.**

**A13.** Certainly restructuring changes, which have significant consumer impacts, require the careful consideration and development of Commission regulations and consumer education programs to ensure a smooth transition. The Staff believes that the potential consumer readiness and billing integrity risks associated with CSP billing authorization can be adequately mitigated through such measures.

While the implementation of retail choice in Virginia may result in many new options to consumers, choices involving billing options are neither technically complex nor a new experience for most customers. In the Staff's opinion, authorizing CSP billing is no more confusing than requiring or allowing the former monopoly service provider to continue billing for services now rendered by the new customer-selected provider. In fact, it seems intuitive that most customers would normally expect to discuss and

agree to billing and payment arrangements with the provider of the retail service they are actively procuring. A denial of billing authority to that service provider does not seem consistent with such expectations.

Additionally, concerns regarding potential adverse consumer impacts associated with restructuring changes must be balanced against potential contributions to the development of Virginia's competitive retail energy supply market, an essential policy goal at this time.

**Q14. HOW WOULD ISSUES OF CONSUMER READINESS AND BILLING INTEGRITY BE ADDRESSED SPECIFICALLY?**

**A14.** By assigning direct and specific responsibility to one party, the CSP, to offer and coordinate billing arrangements, confusion would be minimized not only among consumers, but also among the retail service providers. Consumer understanding would be enhanced further by: 1) including in Virginia's Consumer Education Program explanations of the CSP's responsibility for coordinating billing arrangements and the basic billing services and options which may be offered; and 2) requiring CSPs to specifically disclose billing options and any applicable charges, and to obtain an affirmative agreement by the customer before enrolling a new customer. Additionally, the Commission will develop minimum bill format and content requirements to ensure bill clarity, as required by § 56-592 D of the Act, and establish



consumer complaint resolution procedures. The Commission would also develop regulations and licensing requirements, as well as oversee the development of standard business practices and electronic data exchange protocols, to govern coordination between retail service providers and to protect the integrity of the billing process.

**Q15. HOW WOULD THE AUTHORIZATION OF CSP BILLING PROMOTE THE DEVELOPMENT OF A COMPETITIVE RETAIL ENERGY SUPPLY MARKET?**

**A15.** The customer communication link established through the billing process is, or has the potential to become, a valuable marketing tool for CSPs in terms of product branding and promotion. CSPs would be able to offer choices desired by customers, in excess of minimum requirements, with respect to bill format, content, and timing. Additionally, the billing process provides a platform for the marketing and provision of value-added non-electric services. Such billing features and value-added services could become important components of the total energy supply package offered by CSPs. It should be noted that the NEMA, a non-profit trade association representing energy marketers, emphasized these potential benefits in its comments and strongly urged the Commission to recommend CSP billing authorization and provide for the three billing options included in the Discussion Plan.

**Q16. WHAT APPROACHES HAVE OTHER RESTRUCTURING STATES PURSUED WITH RESPECT TO RETAIL ELECTRIC BILLING?**

**A16.** The majority of states implementing electric industry restructuring have adopted billing structures with major features similar to the Discussion Plan and the Staff proposal. These features include authorization of the CSP to offer billing arrangements including options for either separate billing by the LDC and CSP or a consolidated bill prepared by either the LDC or CSP. States with this basic structure include Arizona, Arkansas, California, Delaware, Illinois, Maryland, Montana, New York, Oregon, and Pennsylvania. At the same time, in most of these states electric cooperatives and municipals are afforded exemptions to either direct retail access or metering and billing restructuring provisions. In California, Delaware, Maryland, Oregon, and Pennsylvania, cooperatives and municipals are directly exempted from restructuring provisions. In fact, the electric cooperative in Delaware is specifically required to issue consolidated bills and to retain the metering function.

**Q17. PLEASE COMMENT ON THE ISSUE RAISED BY THE COOPERATIVES WITH RESPECT TO THE STATUTORY CRITERIUM PROVIDED IN § 56-581.1 OF THE ACT REGARDING**

**CONSIDERATION OF "DEGREE OF CONTROL EXERTED OVER  
UTILITY OPERATIONS BY UTILITY CUSTOMERS."**

**A17.** The ownership structures of electric cooperatives and municipal utilities are significantly different from those of investor-owned utilities. The customers of electric cooperatives are, in fact, the owners and are represented by boards of directors elected by the customers. Municipal utilities, of course, are under the control of publicly elected officials. Due to the influence these utilities' customers can exert through the election of boards of directors and public officials, and because these organizations may be non-profit with member or constituency focused missions, an argument can be made that these entities will naturally pursue the best interests of their customers. From this perspective of customer control, one could assert that statutory requirements on cooperatives and municipals are not needed to promote customer interest.

While the Staff believes that this argument has merit in the context of customers as a whole, it must be recognized that the premise is not necessarily applicable for an individual customer or a minority group of customers who may hold divergent views from the majority. Additionally, this view fails to consider what impact divergent business rules and practices in the service territories of these utilities may have on the development of

Virginia's statewide competitive electricity market in light of supplier concern with uniformity. With the exception of the Cooperatives, no commenter suggested varying billing requirements by incumbent electric utility. In fact, other comments addressing the issue of varying retail billing service by region, incumbent electric utility, and customer group, appeared to recommend consistency without variation.

On the other hand, cooperatives and municipals are relatively small organizations with less available resources than investor-owned utilities and serve significantly fewer customers. Cooperative service is frequently in rural or isolated geographic territories. In many cases, these utilities' modes of operation may be less able to accommodate restructuring modifications without substantial impact on customers who continue to take regulated bundled utility service. The restructured electric industry is heavily dependent on the automated processing of massive amounts of information, which in turn is dependent on coordinated business practices and supporting information technology. Restructuring efforts frequently require significant time and cost investments for complex business system modifications, design, and development. The required changes in information systems and business practices are more likely to significantly impact the operations of

cooperatives and municipals than Virginia's much larger investor-owned utilities.

**Q18. IN LIGHT OF THESE CONSIDERATIONS, WHAT IS THE STAFF'S  
RETAIL BILLING PROPOSAL WITH RESPECT TO MUNICIPAL  
UTILITIES AND ELECTRIC COOPERATIVES?**

**A18.** Whether to exempt electric cooperatives and municipals from billing-related requirements imposed on the investor-owned utilities is ultimately a policy decision for the General Assembly. It is noteworthy that the General Assembly has enacted legislation recognizing the special circumstances of both municipals and cooperatives in the Act and elsewhere in the Code of Virginia. For example, municipals may choose not to participate in direct retail access, and cooperatives are assigned unique rights and obligations with respect to the provision of generation default service.

In recognition of the unique circumstances discussed above, as well as the existing special legislative treatment of municipals and electric cooperatives in Virginia and neighboring states, the Staff proposes that the Commission consider recommending exemptions from certain billing-related LDC requirements. One alternative would be to exempt cooperatives and municipals from, or delay the effective dates for, a requirement to support consolidated billing options. This approach could also be applied to

some subset of these utilities, for example, the smaller and/or more rural cooperatives and municipals. Such an exemption should not preclude a voluntary opt-in by the utility to support either or both consolidated billing options now or in the future. The Staff suggests that any such exemption should consider a reciprocity provision under which the cooperative or municipal would lose the comparable exemption if the utility, or an affiliate, offered a consolidated billing option as a CSP to a Virginia customer outside of the utility's service territory.

Another alternative would be to follow Delaware's approach in mandating that electric cooperatives perform LDC consolidated billing for all customers, effectively precluding separate billing and CSP consolidated billing options. Absent public interest considerations, the Staff would be concerned with the policy consistency of authorizing competitive entities to provide a retail service, while at the same time precluding those entities from directly billing their retail customers for services rendered. However, this option would ensure the provision of a consolidated bill for customers choosing a competitive provider. To the extent a consolidated bill is critical to encouraging consumers to participate in the competitive market, this could be viewed as a viable alternative.

**Q19. PLEASE COMMENT ON AEP'S PROPOSAL TO AUTHORIZE AND LICENSE BILLING AGENTS TO PROVIDE RETAIL BILLING SERVICES.**

**A19.** The Staff is not entirely clear on the value of licensed retail billing agents ("BAs"), and opposes introducing a new type of licensed retail service provider at this early stage of the restructuring transition. Such a proposal would potentially expose small commercial and residential consumers to three different types of retail service providers (LDC, CSP, BA) and provide an opportunity for confusion regarding retailer responsibilities and coordination. An additional retail service provider would also significantly increase transactional complexity among service providers and complicate the development of regulations, uniform business practices, and EDI standards.

Further, under the Discussion Plan and the Staff's proposal, licensed CSPs may contract with entities to perform billing services on their behalf, in a manner similar to LDCs' current employment of contractual services. Of course, also as with current LDCs, licensed CSPs would remain entirely responsible and accountable to their retail customers for these contractors' performance. In any event, the Discussion Plan and the Staff's proposal provide a billing market structure that accommodates wholesale competition

and a competitive retail service provider (CSP) to funnel any competitive benefits to retail customers. The Staff does not understand how the addition of this second competitive retail entity (BA) would significantly benefit the development of a competitive retail energy supply market, the appropriate focus of restructuring efforts at this time. Consideration of this proposal should be delayed until later in the restructuring process.

**Q20. PLEASE COMMENT ON AEP'S PROPOSAL TO ALLOW BILLING OPTIONS TO DEVELOP FROM MARKET FORCES WITHOUT REGULATORY REQUIREMENTS FOR SPECIFIC OPTIONS AND ASSOCIATED LDC SUPPORT.**

**A20.** The Discussion Plan and the Staff proposal simply authorize licensed CSPs to offer and provide billing service to its retail customers and ensure that the CSP is able to offer both standard and consolidated billing service. In conjunction with this authorization, the CSP assumes responsibility for offering, settling, and coordinating billing arrangements. However, the CSP, in response to market forces, decides which billing services and options to offer. The retail customer, of course, makes the ultimate choice through the selection of a CSP.

The proposed regulatory requirements are directed at the LDC, a regulated monopoly public service company that is not subject to the same



market forces as the CSP. These requirements are proposed to ensure that the CSP is able to offer and provide at least a minimal level of billing services/options in an efficient manner. This objective requires the cooperation of the LDC and includes the establishment and use of standard business practices and electronic data exchange protocols. The Staff believes this proposed regulatory intrusion is necessary to enable and facilitate a reasonable level of competitive choice for both the CSP and the retail customer.

**Q21. DO COMMENTERS BELIEVE THE JANUARY 1, 2002, EFFECTIVE DATE FOR THE THREE BILLING OPTIONS PRESENTED IN THE DISCUSSION PLAN ALLOWS SUFFICIENT TIME FOR THE REQUIRED IMPLEMENTATION ACTIVITIES?**

**A21.** The Industrials believe sufficient time exists. However, all the incumbent utilities express some concern with respect to the effective date of these options and the time required to make policy decisions, develop rules, establish electronic data exchange standards, and modify and test business systems. Virginia Power and Delmarva suggest delaying the effective date for the CSP consolidated billing option. Virginia Power recommends a one-year delay. Conversely, AEP indicates concern with the effective date for the LDC consolidated billing option, stating that the development and testing of

consolidated billing system would require 24 to 28 months. However, AEP notes it has a limited LDC consolidated billing system under development that requires the use of "bill-ready" data and the purchase of supplier receivables. This system will be ready by 2001. Allegheny Power suggests providing LDCs the flexibility to have only certain of the options available on January 1, 2002. LG&E expresses interest in a general delay. The Cooperatives state that there is not sufficient time for development and implementation activities and that changes in the retail billing structure should be delayed until the competitive energy supply market is well established.

**Q22. WHAT DOES THE STAFF PROPOSE WITH RESPECT TO THE EFFECTIVE DATE FOR RETAIL BILLING SERVICE AND OPTIONS?**

**A22.** The Staff proposal maintains a January 1, 2002, effective date for the standard billing service (separate billing by the LDC and the CSP) and for the LDC consolidated billing option. The Staff proposes delaying the effective date for the CSP consolidated billing option until January 1, 2003.

Virginia Power, Delmarva, and Allegheny Power roughly estimate that system changes and modifications will require approximately nine months subsequent to the development of rules, business practices, and EDI standards. The Staff does not know the time requirements for changes and

testing related to the CSP consolidated billing option, but has observed that the technical implementation of this option in neighboring states (e.g., Maryland and Pennsylvania) has generally lagged behind the LDC consolidated and separate billing options.

Because of the potential adverse public consequence of major billing deficiencies, the Staff believes reasonable caution should be exercised by modestly delaying the effective date for the CSP consolidated billing option. The Staff believes that this modification would largely address the time concerns expressed by Allegheny Power, Virginia Power, Delmarva, and, perhaps, LG&E. In light of the Staff's following proposal to eliminate requirements for LDC support of the "rate-ready" protocol, the Staff is hopeful that AEP would be able to meet the proposed effective date for the LDC consolidated billing option without delay.

Additionally, to the extent the unique circumstances of the cooperatives and municipals are not addressed, as previously discussed, the Staff would propose consideration of an additional year delay in the effective date for the service territories of these utilities.

**Q23. EXPLAIN "RATE-READY" AND "BILL-READY" PROTOCOLS WITH RESPECT TO CONSOLIDATED BILLING SERVICE OPTIONS.**

**A23.** Under a "rate-ready" protocol the party preparing the consolidated bill is provided the rate structures and calculates the billing charges of each retail service provider for inclusion on the bill. Under a "bill-ready" protocol, each retail service provider calculates its own billing charges and provides this information to the party preparing the consolidated bill for incorporation in allotted space on the bill. The "bill-ready" protocol appears to be the preferred standard among neighboring restructuring states and in uniform business practices being developed at the national level.

**Q24. SHOULD LDCs BE REQUIRED TO SUPPORT CONSOLIDATED BILLING SERVICE OPTIONS UNDER THE "RATE-READY" PROTOCOL AS SPECIFIED IN ITEM A OF THE DISCUSSION PLAN?**

**A24.** No. In submitted comments, AEP, Allegheny Power, the Cooperatives, and Virginia Power strongly oppose a requirement that LDCs be required to support consolidated billing under the "rate-ready" protocol. Additionally, the Staff did not note specific advocacy for such a mandated requirement in other submitted comments. The Staff agrees with the expressed concerns regarding the potential variety and complexity of CSP rate/pricing structures and the associated system modifications and coordination efforts required to accommodate the "rate-ready" protocol. While the Staff believes that LDCs should negotiate with interested CSPs in good faith to provide "rate-ready"

consolidated billing where practical for just compensation, the Staff does not think it is appropriate to require this protocol.

**Q25. SHOULD THERE BE OTHER LIMITATIONS ON THE REQUIREMENTS IMPOSED ON THE LDC TO SUPPORT CONSOLIDATED BILLING OPTIONS?**

**A25.** Yes. While it is appropriate to require LDCs to provide consolidated billing support services to CSPs, such requirements should be reasonable. These limitations are important not only because of fairness issues with respect to the LDC, but also to limit underlying transactional complexity that could have adverse effects on both billing integrity and business system costs. The Staff proposal includes the limitations and conditions specified in items B and C of the Discussion Plan. These provisions specify that the LDC is not required to: 1) support an LDC consolidated billing option for customers (LDC account) that have more than one CSP; 2) prorate a customer's distribution charges between CSPs; and 3) buy or sell receivables. The Staff did not note any objections to these provisions in submitted comments.

It should be noted that the Staff proposal also incorporates Items D and E of the Discussion Plan, which elicited no objections in comments. These provisions simply reaffirm two traditional regulatory principles: 1) entities have the right to outsource work, but must retain ultimate

responsibility to customers, and 2) regulated utilities cannot provide preferential treatment to competitive affiliates.

**Q26. WHAT COMMENTS WERE OFFERED WITH RESPECT TO THE BILLING AND COLLECTION OF STATE AND LOCAL CONSUMPTION TAXES?**

**A26.** Comments were received on this issue from incumbent utilities. Generally, the comments raised two issues. One of these issues concerns which party should be responsible for the billing, collection, and remittance of state and local consumption taxes, the special regulatory tax, and the consumer utility tax. The second issue raised was whether the CSP consolidated billing option would be consistent with the current tax statute provisions regarding responsibility for billing, collecting, and remitting these taxes.

Several of the utilities advocate that the billing party should be assigned the responsibility for billing and collecting such taxes. The Staff agrees with AEP that this issue is one of significant public policy that the General Assembly must decide.

**Q27. WHAT COMMENTS DOES THE STAFF OFFER REGARDING RESPONSIBILITY FOR TAX BILLING AND COLLECTION?**

**A27.** The Staff's understanding of the current intent of the law is that the incumbent electric utilities providing distribution service, LDCs, continue to perform this function. If this is the case, there is little reason to redistribute that responsibility at the present time as a result of the Staff's proposal to restructure retail electric billing.

First, the continued performance of such responsibilities by LDCs could avoid any concerns regarding potential disruptions to state and local tax collection processes that might result from a reassignment of responsibilities to a number of new competitive suppliers.

Further, statutory revisions have been enacted by the General Assembly to change the basis of the aforementioned taxes from revenue to consumption, effective in 2001. Under the Staff proposal, the LDC retains responsibility for measuring consumption, at least for the present. Even if other parties eventually provide metering services, the LDC for the foreseeable future would be provided total customer consumption data for retail distribution billing purposes.

Finally, under all billing scenarios, the LDC must bill customers for services rendered and collect payment. Certainly, consumption-based taxes can be efficiently included in that billing process. As pointed out previously,

consolidated billing options affect how, and not whether, the LDC procedurally bills and collects from customers.

Consequently, the Staff does not believe there is a fundamental conflict between statutes establishing responsibility for state and local tax billing, collection, and remittance and the Staff's retail billing proposal including the CSP consolidated billing option. Should the Commission find a conflict between the tax statutes and the Staff's proposal for retail billing, the Staff would propose that the Commission recommend clarifying revisions to the tax statutes.

**Q28. DOES RESTRUCTURING RETAIL BILLING RESULT IN LDC COST RECOVERY ISSUES?**

**A28.** Yes. Section 56-581.1 D of the Act requires that the reasonable costs of required billing coordination activities be recovered by LDCs. The Staff believes that the incremental cost of LDC coordination activities associated with the proposed standard billing service (separate billing by each retail service provider) is likely to be immaterial. By comparison, LDCs will incur substantially more costs in providing consolidated billing support services to the CSP under both the CSP and the LDC billing options, especially relating to system design and development. At the same time, under the CSP consolidated billing option, LDCs should also experience cost savings, for



example, printing and paper costs, postage, and certain remittance processing costs.

In submitted comments, the incumbent utilities indicate that LDCs should be allowed to recover their reasonable net costs. The Staff agrees with this general premise. Of course, the determination of net costs and cost savings specifically attributable to restructuring retail billing may be extremely difficult and controversial. These issues should be addressed in future proceedings. More relevant to current policy issues, there appears to be disagreement regarding the general approach for such cost recovery.

**Q29. EXPLAIN THIS DISAGREEMENT IN APPROACH TO COST RECOVERY.**

**A29.** The incumbent utilities appear to favor unbundling retail distribution rates with resulting billing credits and charges on the retail customer's bill. Section 56-581.1 F of the Act requires that, upon making a formerly regulated service competitive, LDC rates be adjusted to exclude the associated cost of that service. However, the Staff does not believe that retail rate unbundling is necessary in this case, especially for such relatively small billing amounts. Further, the Staff is concerned that such rate unbundling may result in consumer confusion with respect to the "price to compare" for competitive energy supply. At a minimum, extra billing line items for billing

credits and charges may tend to antagonize consumers. In addition to these practical concerns, the Staff also believes that retail rate unbundling may not be the best approach conceptually.

**Q30. PLEASE EXPLAIN FURTHER.**

**A30.** The Staff does not view its restructuring proposal in the same context as the competitive restructuring of electric energy supply. Unlike its responsibilities for providing energy supply services, the LDC will retain responsibility for billing and collecting from its retail distribution customers under all restructured billing scenarios. The procedures and mechanics of the LDC billing process will vary under consolidated billing options, but the LDC still calculates and provides a customer specific bill and collects payments from customers.

As pointed out above, under standard billing service, the Staff does not believe there should be material cost impacts on the LDC. Currently, for bundled electric service, the LDC prepares and sends a paper bill directly to retail customers, and receives and processes remittances from those customers. Generally, the same activities and procedures, requiring the same resources, should be followed when sending a separate bill for unbundled distribution service. In this context, there are no avoidable billing costs to unbundle from regulated rates.

On the other hand, under the Staff proposal, CSPs have the authority to offer a new consolidated billing service with two options to retail customers. LDCs are required to provide consolidated billing support services to the CSP, at the discretion of the CSP, to enable the offering and provision of this service. Certainly, this results in potential cost/cost saving impacts on the LDC. However, it seems logical to Staff that the LDC should recover the net cost impact of providing these required support services from, or pass on net cost savings to, the party to which it is providing the service, the CSP. In turn, the CSP would recover such costs, or pass on such savings, along with its self-incurred billing costs, in charges to its retail customers receiving the consolidated billing service.

Consequently, the Staff proposes that, if needed, the Commission recommend clarification of or modification to Section 56-581.1 F of the Act to allow the Commission the flexibility to consider this approach to LDC cost recovery, as an alternative to retail rate unbundling. It should be noted that the comments of the OAG recommended not foreclosing consideration of this alternative treatment.

**Q31. WHAT WERE THE OAG'S COMMENTS REGARDING THE DISCUSSION PLAN'S PROVISION FOR COMMISSION AUTHORITY TO DELAY IMPLEMENTATION OF THE PLAN?**

**A31.** The OAG supports such authority and suggests the inclusion of an additional consideration as justification for invoking such authority. The consideration is “adverse effects on the development of effective competition in electric service.” The Staff agrees and has incorporated this suggestion into its proposal.

The OAG also recommends, in conjunction with this authority, adding the requirement: “The Commission must assess the readiness of customers and suppliers prior to implementing any element of the plan.” It appears that the OAG may be proposing a formal proceeding for the Commission to make a finding.

While the Staff believes that assessment of consumer readiness must occur continually throughout the implementation process, the Staff is hesitant to require a special formal proceeding in advance of identifying issues requiring resolution. The Staff believes that in the event concerns regarding consumer readiness arise, any interested party may request, or the Commission on its own motion may initiate, a formal proceeding to resolve such issues. Additionally, the Staff would expect a formal proceeding to consider proposed governing rules for the restructuring of retail billing. This proceeding would also present an opportunity to raise any such concerns.

Consequently, the Staff has not incorporated a requirement for additional formal proceedings in its proposal.

At the same time, the Staff proposes incorporating a provision authorizing and directing the Commission to develop and implement governing rules and a consumer education plan to implement the draft plan and to ensure reasonable levels of billing accuracy, timeliness, and quality, and consumer readiness and protection. Such rule development would consider the appropriateness of performance standards and associated penalties, as suggested by the OAG, and financial security regarding the disbursement of consumer payments including the issue of supplier creditworthiness raised by Virginia Power.

**Q32. HOW WOULD RETAIL BILLING BE HANDLED SHOULD A CUSTOMER'S CSP DEFAULT AND THE CUSTOMER BE RETURNED TO BUNDLED ELECTRIC SERVICE OR GENERATION DEFAULT SERVICE?**

**A32.** The Staff believes that in such an event, the responsibility for billing service should logically fall to the bundled electric service provider or the generation default service provider, respectively, in accordance with regulatory/contractual requirements. LDCs should be required to provide the same level of retail billing support services to generation default service

providers as are provided to CSPs. Should these default service providers require General Assembly authorization to provide retail billing service, the Staff would propose to include such a recommendation in the Draft Plan.

**Q33. MOST OF THE INCUMBENT UTILITIES SUGGEST THE FORMATION OF A WORKING GROUP TO RESOLVE THE HOST OF ISSUES ASSOCIATED WITH IMPLEMENTING THE RETAIL BILLING PLAN AND TO DEVELOP PROPOSED GOVERNING REGULATIONS FOR THE COMMISSION'S CONSIDERATION. WHAT IS THE STAFF'S OPINION?**

**A33.** In conducting implementation responsibilities assigned by the Commission, including development of proposed governing regulations, the Staff would welcome the formal or informal assistance and input of a reasonably sized and technically capable working group with balanced representation from the interested parties. The Staff would be very appreciative of such assistance and input. It should be noted that the Staff would anticipate that participation in such a group would require a substantial commitment in time and effort. The Staff would be interested to know of parties that would be available and have an interest in making such a commitment.

Absent Commission objection, the Staff would prefer to convene such a group as soon as practical. For example, if a general level of agreement to

the Commission's recommendation and draft plan for retail billing service is achieved among the parties, such a group could meet in the mid-January to early February timeframe to focus on developing a coordinated implementation schedule. On the other hand if there is significant dissent, it might be necessary to await final General Assembly action.

**Q34. WHAT IS THE STAFF'S POSITION WITH RESPECT TO VIRGINIA POWER'S RECOMMENDATION TO CONSIDER RETAIL BILLING FOR NATURAL GAS AS WELL AS FOR ELECTRIC SERVICE IN THIS PROCEEDING?**

**A34.** The Staff believes there is not a need to address natural gas in a legislative recommendation at this time. Certainly, the Staff does not object to participation of natural gas representatives in subsequent working groups or proceedings regarding retail billing. However, given the proposed implementation dates, the Staff has general concerns about the potential of work efforts being sidetracked by issues specific to natural gas. The Staff would also note that natural gas distribution companies have not submitted substantive comments in this proceeding at present.

**Q35. DOES THIS CONCLUDE THE STAFF'S TESTIMONY REGARDING RETAIL BILLING SERVICE?**

**A35.** Yes.

**Q36. SHOULD RETAIL ELECTRIC METERING BE MADE A COMPETITIVE SERVICE?**

**A36.** The Staff believes that it is premature to recommend legislative action at this time and proposes the continued study of metering issues. As indicated by the diversity of opinions expressed in the comments submitted in this proceeding, the issues surrounding retail electric metering are much more complex and controversial than those associated with billing. At a minimum, these issues include ones of technology, economics, reliability, logistics, safety, and customer diversity, both in terms of consumption and sophistication. Staff is not yet comfortable with its current depth of understanding regarding the interrelationships of these critical metering issues and the associated ramifications for deciding on an optimal market structure and ensuring metering integrity. Additionally, there is very little market development in those states that have adopted competitive metering, which provides little guidance for determining how best to proceed in Virginia. This limited market activity is understandable since many of these states are just finalizing, or have just recently finalized, implementation.



It is critical that a decision to restructure retail electric metering be accompanied by a reasonable level of confidence that metering integrity can be maintained. Consumption data is the foundation for financial settlements of all market participants. A significant breach of metering integrity could seriously damage or undermine the restructuring effort. While billing errors can be corrected through rebilling or account adjustments, incorrect metering data may not be so easily discovered or corrected. The Staff has not advanced far enough along the learning curve to be able to provide such assurance with respect to competitive metering.

The Staff does believe that the most crucial metering issue, with respect to the development of a competitive energy supply market, relates to availability and accessibility of consumption data by CSPs and customers. The Staff believes that many of the submitted comments in this proceeding support this opinion. Consequently, the continued study of retail electric metering should maintain a focus on this meter data aspect, along with the identification and consideration of both competitive and non-competitive approaches. Currently, the Staff is less clear on the immediate importance or benefits of competitive physical metering services and customer meter ownership with respect to the development of a competitive energy market.

**Q37. WHAT ARE THE KEY ADVANTAGES OF COMPETITIVE METERING?**

**A37.** Advocates of competitive metering frequently focus on the benefits associated with advanced metering<sup>8</sup> and believe that a competitive market is the best mechanism for encouraging and bringing about advanced metering. In fact, the comments of the National Energy Marketers Association ("NEMA") largely reflect this sentiment.

**Q38. WHAT ARE THE ADVANTAGES OF ADVANCED METERING?**

**A38.** The most important aspect of advanced metering regarding the development of a competitive energy supply market is the accessibility of interval (hourly) consumption data. The availability of such customer consumption data affords the CSP significant pricing flexibility, including the ability to send improved price signals to customers. During deliberations considering electric industry restructuring in Virginia, many advocates of such a policy cited the anticipated benefits of improved price signals.

Customers are able to alter demand in response to such prices by reducing usage during high cost on-peak periods. Such responsiveness not only produces individual savings, but also results in global benefits for all

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<sup>8</sup> Advanced metering generally refers to metering configurations that capture consumption data for time intervals consistent with the pricing interval of the wholesale power market (e.g., hourly, also frequently

consumers by reducing total market demand during peak periods and, consequently, average generation market prices. Both Schlumberger and Utility.com reference studies and research in their comments concerning customer responsiveness to price signals and the effects of such response on market prices that appear to support this premise.

At the same time, much controversy remains as to the ability and desire of most small commercial and residential customers to manage their energy usage effectively in response to price signals.

**Q39. WHY IS INTERVAL CONSUMPTION DATA NECESSARY TO PROVIDE A PRICE SIGNAL?**

**A39.** The financial settlement among suppliers in the hourly wholesale market is based upon metered customer consumption data. Absent hourly consumption data, customers are assigned a load profile, reflecting the average usage pattern for their customer class, which is used to distribute each customer's monthly usage over the hours of the month. Regardless of whether a customer's actual usage pattern is more or less favorable, the assumed usage pattern determines the supplier's hourly power supply responsibilities and associated cost. Such an arrangement prevents the supplier from realizing any wholesale power supply savings from more efficient customer

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referred to as interval metering) and that access communication systems (e.g., radio, telephone, cable, etc.)

consumption, and eliminates all incentives for the supplier to provide a time-sensitive price signal to its customers. On the other hand, if hourly consumption data is available, the supplier realizes lower power supply cost when a customer's usage is more efficient. Therefore, the supplier has incentives to provide a price signal to encourage more efficient energy usage.

**Q40. ARE THERE OTHER COMPETITIVE ENERGY SUPPLY MARKET BENEFITS ASSOCIATED WITH ADVANCED METERING AND IMPROVED PRICE SIGNALS?**

**A40.** Yes. The provision of a price signal and the ability of customers to respond to that signal can improve reliability with respect to system power supply and afford customers a tool to mitigate the effects of generation market power. Advanced metering also provides both a vehicle and an incentive for the deployment of energy management products and services. Additionally, the availability of fresh interval consumption data can help competitive suppliers reduce supply cost by more accurately forecasting their day-ahead load for scheduling power deliveries.

**Q41. GIVEN THESE SIGNIFICANT POTENTIAL BENEFITS OF ADVANCED METERING WHY IS THE STAFF NOT READY TO PROPOSE COMPETITIVE METERING AT THIS TIME?**

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for the frequent automated transmittal of that data to remote locations.

**A41.** The Staff has not been able to determine that a competitive metering market is the most effective approach for bringing about advanced metering at this time, at least with respect to small commercial and residential customers. While the Staff is more inclined toward such a conclusion with respect to larger retail customers, there remain substantial issues with respect to market structure that require additional deliberation.

NEMA points out that several restructuring states have made metering competitive, at least for large customers. California, the state with the most experience, implemented competitive metering for customers 20 kW and above on January 1, 1998, and for all customers January 1, 1999. However, as Virginia Power states:

Importantly, there is no proven model for Competitive Metering Services. Other states (including California) have implemented competitive metering. Such markets, however, are still undeveloped and their success is far from certain. For example, based on conversations with utility representatives in California, the Company has found that less than .05% of California customers have taken competitive metering service since metering services were made competitive, with the majority of such customers being large commercial and industrial customers.

Utility.com, referencing a recent study performed by E Source,<sup>9</sup> makes similar observations with respect to California, and also in the United

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<sup>9</sup> Gromer and de Figuerido, *On Your Mark, Get Set, Slow: The Developing Market for Competitive Metering*, E Source (May 2000).

Kingdom where metering for large customers was implemented in 1994 and extended to all customers in 1998:

The experience in California is that very, very few customers of any size have moved to competitive metering, and virtually no small customers have done so.

[In the UK]...competitive metering has largely been limited to customers over 100 kW, with some limited activity for customers between 70 and 100 kW. Smaller customers have not participated.

In view of the complexities and resulting uncertainties surrounding competitive metering and the current limited market activity, the Staff believes it is important to continue monitoring the development of competitive metering markets in other states that have adopted such structure. Whether and how such markets develop may provide valuable information for Virginia's determination on how best to proceed with respect to appropriate market structure, customer availability, and implementation dates.

**Q42. WHY MIGHT COMPETITIVE METERING NOT BE THE MOST EFFECTIVE APPROACH FOR BRINGING ABOUT ADVANCED METERING FOR SMALLER CUSTOMERS?**

**A42.** As pointed out in the comments submitted by Utility.com, the cost of advanced metering installed on a customer-by-customer basis in comparison to potential savings in energy supply costs, may preclude the economic feasibility of small customer participation in competitive metering markets.

In referencing an Arthur Andersen cost study performed for the New York Department of Public Service,<sup>10</sup> Utility.com states:

Arthur Andersen concluded that the all-in cost of competitive metering would be \$26.25 per month for medium and large business customers and \$21.66 per month for residential and small business customers. Given the large differences in average energy bills for the different classes, Arthur Andersen concluded that, at these price levels, large customers would opt for competitive metering service, but that small customers would be unlikely to do so.

While the Staff does not know what the exact cost of metering would be as provided by the competitive market, the magnitude of the above cost estimates, assuming reasonable accuracy, would be prohibitive for most small consumers. In other words, giving small customers a choice with respect to competitive metering may not be giving them a choice at all.

The literature reviewed by the Staff to date would tend to indicate a relatively high small-customer cost for advanced metering as provided on a customer-per-customer basis in the competitive market, in large part due to costs associated with data communication aspects. However, it must be recognized that rapid advancements in technology and associated costs could significantly change this economic equation. As competitive metering markets are opened and develop, it is quite conceivable, if not probable, the metering industry will respond with innovations in technology.

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<sup>10</sup> Arthur Andersen, *Cost Impact of Competitive and Network Meter Reading in New York: Final Report to the New York Department of Public Service* (November 1998).

**Q43. ARE THERE ALTERNATIVE APPROACHES THAT COULD PROVIDE SMALL CONSUMERS WITH THE BENEFITS OF ADVANCED METERING AT A MORE ECONOMIC COST?**

**A43.** Yes. One possibility is utility deployment of automatic meter reading (“AMR”) network systems. For example, basic meters can usually be modified with the addition of device or module to count and record meter wheel turns and a radio transmitter to send the data to a neighborhood data gathering device. This device, in turn, communicates the gathered consumption data to devices further upstream for additional processing and/or communication ultimately to the business office. The economic advantage of such systems is largely dependent on the geographic density of metered customers and economies of scale associated with planned large-scale deployment. A key economic feature of these systems is the upstream deployment of more expensive data gathering and processing components, which allows the sharing of the cost of these devices by multiple customers.

According to Utility.com, which proposes that the Commission make metering competitive for large customers only and implement policies to encourage the incumbent utilities to deploy advanced metering for small commercial and residential customers:



...utility deployed advanced metering can be cost effective for even small customers. A metering white paper prepared for NARUC concluded that utilities can deploy hourly metering for residential customers at a cost of just \$100 upfront and \$1 to \$2 per month.<sup>11</sup> The Arthur Andersen study reached a similar conclusion. It found that utilities can provide advanced metering for residential and small commercial customers at an all-in cost of just \$2.50 per month, compared to the \$21.66 under competitive metering.

...it is necessary to continue with utility metering at least for small customers, in order to achieve the greater goal of retail electric competition. By contrast, moving forward with metering competition for small customers would in fact delay the benefits of retail competition. This is a case where less (competition in metering) is more (competition in generation).

#### **Q44. WHY DOES STAFF PROVIDE THE FOREGOING DISCUSSION?**

**A44.** The Staff has two purposes. First, the discussion highlights a global restructuring concern of the Staff. The Staff believes it is important to recognize that policy to promote the development of a competitive retail energy supply market may be optimized by a carefully crafted mix of competitive and regulatory solutions, especially during the early stages of industry transition. The Staff's retail billing proposal certainly represents such an approach. An assumption that a competitive solution to every element of restructuring is preferable, without reasonable scrutiny, could actually be detrimental to the larger competitive objective.

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<sup>11</sup> Plexus Research, *Direct Access Metering and Data Communication Requirements*, prepared for NARUC, §4.2.1 (March, 1998).

Second, while not proposing a mandate that utilities undertake a massive investment in metering technology for small commercial and residential consumers at the current time, the Staff believes many of the points made by Utility.com appear logical. The Staff suggests that the Commission consider the desirability of additional study with respect to full or partial utility provision of advanced (or interval) metering to small commercial and residential customers. Should the Commission decide that additional study is warranted, the Commission might consider directing some or all utilities to conduct feasibility studies regarding possible alternatives.

**Q45. DOES THE STAFF HAVE CONCERNS WITH RESPECT TO CONSUMER READINESS REGARDING COMPETITIVE RETAIL METERING SERVICE?**

**A45.** Yes. The Staff has concerns about consumer readiness with respect to small commercial and residential customers. The Staff believes that the decision to purchase competitive metering service may frequently be a decision to purchase advanced metering. The financial decision to procure advanced metering can be complex in that the investment and incremental monthly costs of the advanced metering must be weighed against potential energy supply savings. This requires that customers understand their energy usage patterns and judge their ability to alter or manage such usage. It also could

require an understanding of wholesale market prices or, at a minimum, would require consideration of the impact of time-differentiated pricing. The development of effective consumer education efforts would be very challenging. These complexities could result in consumer vulnerability to uninformed decisions with adverse financial impacts.

**Q46. BRIEFLY SUMMARIZE THE POSITIONS PRESENTED IN COMMENTS SUBMITTED BY THE INCUMBENT UTILITIES IN THIS PROCEEDING REGARDING THE DISCUSSION DRAFT PLAN FOR RETAIL METERING SERVICE?**

**A46.** AEP supports competitive retail metering service for all customers taking generation service from CSPs, effective January 1, 2002. AEP proposes the authorization and licensing of Meter Service Providers ("MSPs") and Meter Data Management Agents ("MDMAs") to provide physical metering service and meter information service, respectively.

Allegheny Power indicates the Discussion Plan is in the public interest, but is opposed to customers owning billing meters. Allegheny Power also indicates that, practically speaking, only larger customers will be able to own a more sophisticated meter.

Delmarva suggests competitive metering service should be for customers with loads of 300 kW or greater and that a further resolution of

issues is needed before implementation. Delmarva also states that the LDC should own the meter, and that the focus should be on access to meter data including the concept of meters with multiple data ports and other devices providing access to meter data.

LG&E proposes limiting competitive metering to large customers and indicates that the LDC can provide metering services to small customers at a lower price. LG&E is opposed to small customers owning meters.

Virginia Power proposes additional examination of the more onerous and complex issues associated with competitive metering before establishment of a firm schedule and plan for implementation. If the Commission recommends competitive metering, Virginia Power suggests effective dates for large customers of January 1, 2004, and for small customers of January 1, 2005. Virginia Power also maintains that the meter ownership should remain with the LDC, but endorses the authorization of licensed MSPs and MDMAs to provide retail metering services.

Most of the investor owned utilities suggest the formation of a working group to address and resolve the numerous and complex issues associated with competitive metering.

The Cooperatives do not believe the Discussion Plan is in the public interest at this time and are opposed to a recommendation at this time. The

Cooperatives also indicate that the Discussion Plan fails to consider the degree of customer control over cooperative operations.

**Q47. SUMMARIZE THE POSITIONS PRESENTED IN COMMENTS SUBMITTED BY OTHER PARTIES IN THIS PROCEEDING REGARDING THE DISCUSSION DRAFT PLAN FOR RETAIL METERING SERVICE?**

**A47.** The OAG is generally supportive of the Discussion Plan assuming adequate measures are taken with respect to consumer education and protection. NEMA and the Industrials strongly favor competitive metering and generally support the Discussion Plan. Utility.com supports making metering competitive for larger customers, but not for smaller customers. Instead, Utility.com proposes the development and implementation of policies that would encourage incumbent utilities to provide advanced metering to smaller customers. AEI suggests that the focus of retail metering service should be the meter information as defined in the Discussion Plan and that customer control and ownership of that information is critical to successful competitive energy markets. AEI proposes that incumbent utilities make meter pulse outputs available immediately and the competitive transitioning of meter services over a reasonable time. Schlumberger is neutral with respect to competitive metering, but strongly advocates advanced metering.

**Q48. WHAT DOES THE STAFF PROPOSE WITH RESPECT TO RETAIL METERING SERVICE?**

**A48.** As indicated previously, the Staff proposes that the Commission not recommend making retail electric metering service competitive at this time. The Staff proposes the continued study of metering issues and monitoring of competitive metering markets. The Staff believes that such study and a fuller understanding of complex metering issues is necessary to determine the market structure that would best serve the public interest in Virginia.

Consistent with the suggestions offered in the comments by several incumbent utilities, the Staff proposes that the Commission or the Staff establish a metering work group or task force with reasonable technical expertise. The work group would assist the Staff with additional study of retail metering service and the development of market structure recommendations to present to the Commission no later than September 1, 2002. Assuming the General Assembly approves a plan for restructuring, the Staff would suggest that the work group convene immediately following the establishment of Commission rules for retail billing service. The Staff would anticipate a timeframe close to September 1, 2001.

Additionally, as suggested earlier, the Staff proposes that the Commission consider the desirability of further studying incumbent utility

solutions regarding the provision of advanced metering to small commercial and residential customers.

**Q49. SHOULD THE COMMISSION DECIDE TO RECOMMEND MAKING RETAIL ELECTRIC METERING A COMPETITIVE SERVICE, WHAT DOES THE STAFF PROPOSE?**

**A49.** The Staff would propose:

1. limiting the authorization to provide competitive metering service to the CSP of the retail customer, effective January 1, 2004;
2. limiting the availability of competitive metering service to large retail customers (100 kW and greater); and
3. limiting meter ownership to the CSP or LDC.

**Q50. DOES THIS CONCLUDE YOUR TESTIMONY?**

**A50.** Yes.

INTERNET VERSION

COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION

Division of Energy Regulation

PREFILED STAFF TESTIMONY

Ex Parte: In the Matter Concerning a Draft Plan for  
Retail Electric Metering and Billing Services

CASE NUMBER: PUE000346

DATE FILED: OCTOBER 12, 2000



§ 56-581.1. Authority to make services competitive.

A. On or before January 1, 2001, the Commission shall recommend to the Legislative Transition Task Force whether metering services, billing services, or both, for which competition has not been otherwise authorized by law, may be provided by persons licensed to provide such services. The Commission's recommendation under this subsection as to the appropriateness of and date of commencement of competition (i) shall include a draft plan for implementation of competition for metering services and billing services and (ii) may vary by service, type of seller, region, incumbent electric utility, and customer group. Such recommendation and draft plan, which shall be developed after notice and an opportunity for hearing, shall:

1. Be consistent with the goal of facilitating the development of effective competition in electric service for all customer classes;
2. Take into account the readiness of customers and suppliers to buy and sell such services;
3. Take into account the technological feasibility of furnishing any such services on a competitive basis;
4. Take into account whether reasonable steps have been or will be taken to educate and prepare customers for the implementation of competition for any such services;
5. Not jeopardize the safety, reliability or quality of electric service;
6. Consider the degree of control exerted over utility operations by utility customers;
7. Not adversely affect the ability of an incumbent electric utility authorized or obligated to provide electric service to customers who do not buy such services from competitors to provide electric service to such customers at reasonable rates; and
8. Give due consideration to the potential effects of such determinations on utility tax collection by state and local governments in the Commonwealth.

B. Competition for metering services, billing services, or both, may be implemented concurrently or pursuant to separate schedules as determined by the General Assembly.

C. If, on or before January 1, 2001, the Commission has not recommended that competition is appropriate for (i) metering services, (ii) billing services, or (iii) any portion of either service, the Commission shall continue to consider such matters and report thereon to the Legislative Transition Task Force no less frequently than annually until such services are made competitive.

D. Upon enactment of legislation making competitive metering services, billing services, or both, an incumbent electric utility shall undertake such coordination, with persons licensed to provide such service, as the Commission deems reasonably necessary to the development of such competition, provided that the reasonable costs of such coordination are recovered by such utility. The foregoing shall apply to an affiliate of an incumbent electric utility if such affiliate controls a resource that is necessary to the coordination required of the incumbent electric utility by this subsection.

E. Any person seeking to sell, offering to sell, or selling competitive metering services, competitive billing services, or both, shall be subject to the licensure requirements of § 56-587.

F. Upon enactment of legislation making competitive a service presently provided by an incumbent electric utility, the Commission shall adjust the rates for any noncompetitive services provided by such utility so that such rates do not reflect costs associated with or properly allocable to the service made subject to competition.

**Staff Proposal**  
**Draft Plan for Retail Billing Service**

Licensed competitive service providers ("CSPs") and generation default service providers are authorized to offer and provide retail billing services to their customers in the Virginia service territories of incumbent electric utilities ("LDCs"), subject to applicable Commission regulations, in accordance with the following schedule:

**Effective January 1, 2002:**

**Standard Billing Service - Separate Billing Option**

Each retail service provider issues a separate bill to the customer for services rendered; and/or

**Consolidated Billing Service - LDC Consolidated Billing Option**

On behalf of the CSP, the LDC prepares and issues a joint billing statement to the customer reflecting charges from each retail service provider, and receives and disburses a single customer payment to each retail service provider.

**Effective January 1, 2003:**

**Consolidated Billing Service - CSP Consolidated Billing Option**

The CSP prepares and issues a joint billing statement to the customer reflecting charges from each retail service provider, and receives and disburses a single customer payment to each retail service provider.

The Commission shall develop and implement regulations, including licensing requirements, and a consumer education plan, that may be required to implement this plan and ensure reasonable levels of billing accuracy, timeliness, and quality, and adequate consumer readiness and protection, pursuant to the Act.

LDCs shall undertake the necessary coordination with CSPs and default service providers to support each of the specified retail-billing service options, subject to the following conditions and exceptions:

- A. LDCs normally shall be required to support consolidated billing options under a "bill-ready" protocol.<sup>1</sup>

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<sup>1</sup> Consolidated billing under a "bill-ready" protocol requires that each retail service provider calculate its own billing charges and provide this information to the party preparing the joint billing statement for incorporation in allotted space on the joint bill.

- B. LDCs shall not be required to provide an LDC consolidated billing option for any retail account that receives services from more than one CSP; nor shall LDCs be required to prorate or provide LDC billing charges for one retail account to more than one CSP for purposes of consolidated CSP billing.
- C. LDCs and CSPs shall not be required to buy or sell receivables in conjunction with consolidated billing options, but may negotiate such arrangements.
- D. LDCs and CSPs may contract with wholesale providers of billing services, but shall retain ultimate responsibility for compliance with relevant Virginia statutes, Commission rules, Commission approved tariffs, established standard business practices, and data exchange protocols governing the provision of retail billing services.
- E. Except as authorized by the Commission, LDCs shall not provide retail billing or billing support services to an affiliated CSP, unless the same such services are offered to all other CSPs under terms and conditions that are no less favorable than those offered to the affiliated CSP.
- F. LDCs shall retain current responsibility for the billing and collection of state and local taxes.
- G. The net costs/savings associated with LDC provision of required consolidated billing support services to CSPs may be settled through tariffs specifying charges/credits from the LDC to the CSP.
- H. The Commission may delay implementation of any element of the plan for the period of time necessary, but no longer than one year, to resolve issues arising from considerations of billing accuracy, timeliness, quality, consumer readiness, or adverse effects on the development of competition in electric service. The Commission will report any such delays and the underlying reasons to the Legislative Transition Task Force or the General Assembly within a reasonable time.